


## Stormwater Management and Groundwater Recharge Scoping Study

**Laguna-Mark West**

**Sonoma Valley**

**Petaluma River**

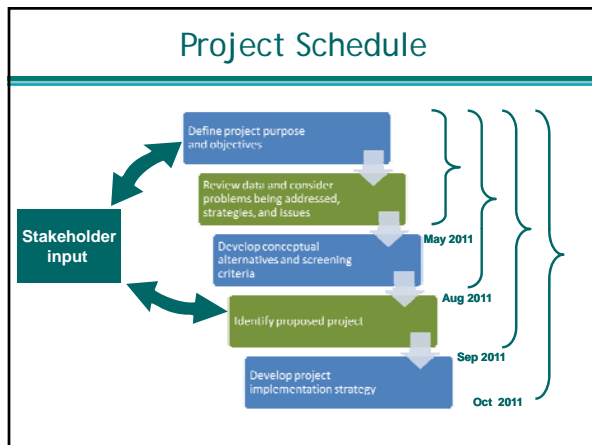
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[www.sonomacountywater.org](http://www.sonomacountywater.org)

## Core Project Objectives

- **Flood hazard reduction**
  - Improve management of stormwater that contributes, directly or indirectly, to reduced flood hazards.
- **Groundwater recharge**
  - Increase beneficial recharge of groundwater, whether or not that recharged groundwater is directly accessible as water supply.

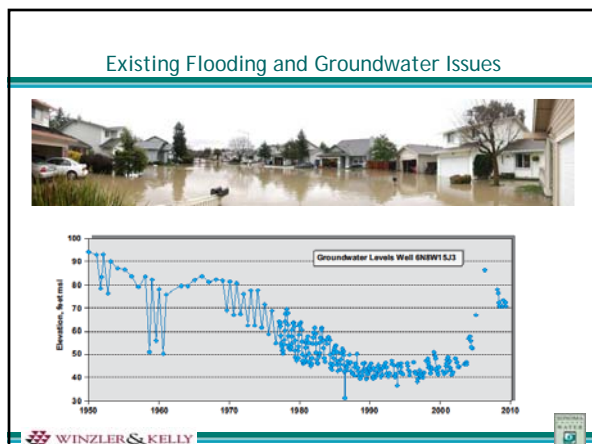


## Laguna-Mark West Watershed



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## Draft Project Objectives

### Core Objectives

- Flood hazard reduction
- Groundwater recharge

### Supporting Objectives

- Water quality
- Water supply
- System sustainability
- Ecosystem
- Agricultural land
- Open space
- Community benefits

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## Laguna-Mark West Watershed Overview

- 250 square miles
- Three major tributaries
- Five incorporated cities
- Three major unincorporated areas

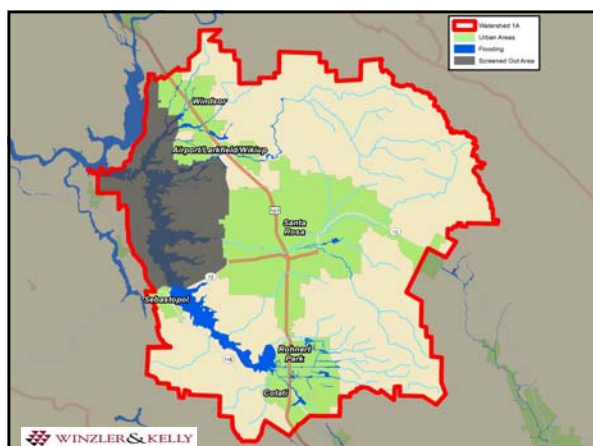
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## Flood Hazard Reduction and Prioritized Study Area

- Flood Hazard Reduction
  - Are there locations of known/historical urban flooding downstream?
  - Is there significant upstream drainage/catchment area?

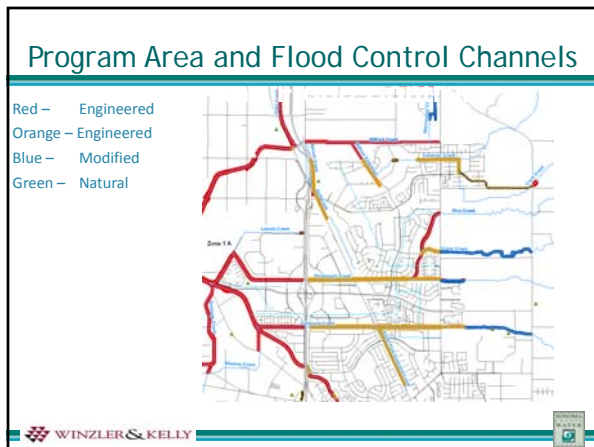
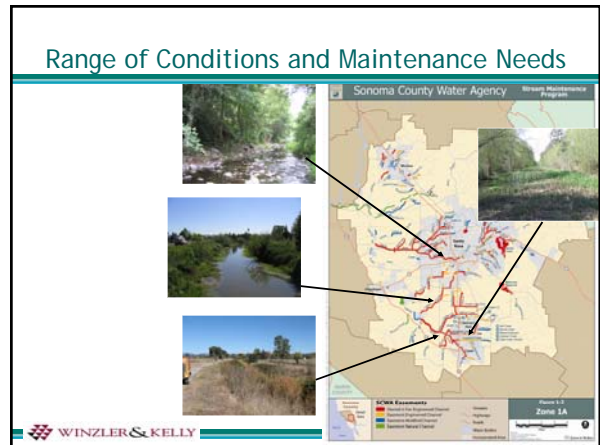
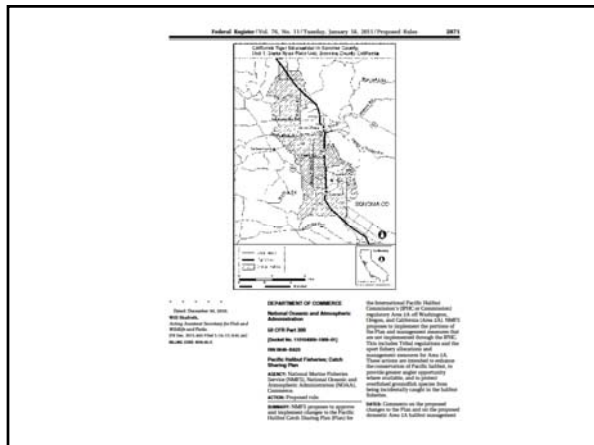
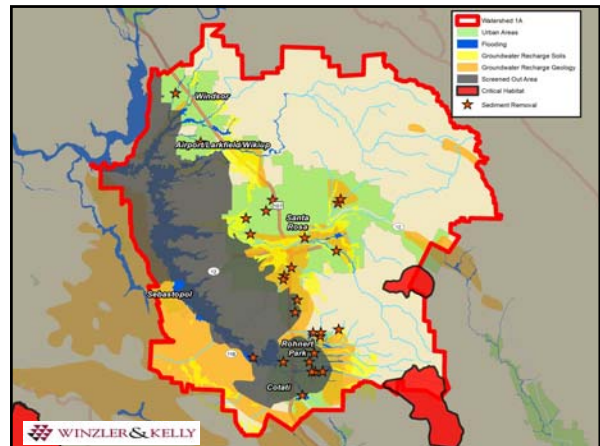
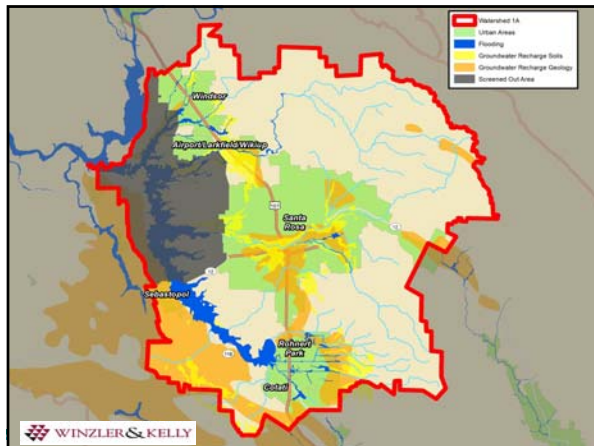
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## Groundwater Recharge and Prioritized Study Area

- Groundwater Recharge
  - Can we expect the shallow geologic formation to be reasonably permeable?


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### Foss Creek





### Lands End



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### Giacomini Wetland Restoration

- Removal of 14,000 ft of levees
- Restoration of 550 acres of wetlands
- Lagunitas Creek floodplain enhancement



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### Coleman Creek




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### Urban Creek Daylighting

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### Clarks Creek, Del Norte County

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### Constructed Wetlands at American Memorial Park, Saipan




- Demonstration Project
- Educational Brochure
- Student Assistance
- Community Groups

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### Salmon Creek Falls Environmental Center



- Environmental Education of Youth
- Certified LEED™ Platinum

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### Groundwater Recharge and Prioritized Study Area

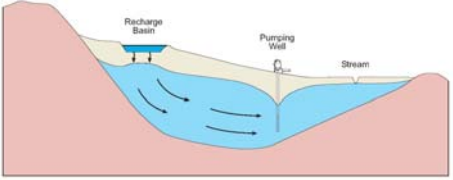
- Groundwater Recharge
  - Can we expect the shallow geologic formation to be reasonably permeable?

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### Groundwater Recharge Project Examples

Managed aquifer recharge is a proven means of replenishing groundwater

- Different techniques
- Various water sources




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### San Bernardino Valley




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### Rancho California Water District



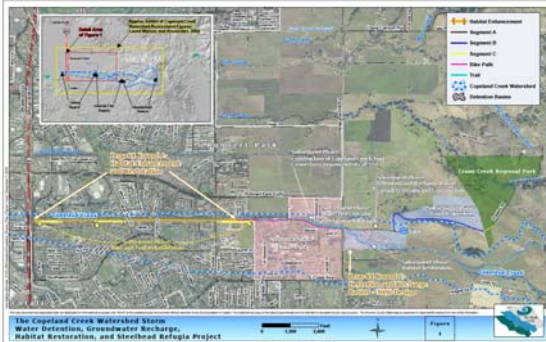
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### Santa Clara Valley Water District



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## Copeland Creek



## Stakeholder Input

### Task 1. Provide Feedback on Draft Objectives

#### Core Objectives

- Flood hazard reduction
- Groundwater recharge

#### Supporting Objectives

- Water quality
- Water supply
- System sustainability
- Ecosystem
- Agricultural land
- Open space
- Community benefits

Did we miss any?

Do Supporting Objectives have equal relative importance to you?

### Task 2. Help us Develop Project Concepts

- Do you have concepts for potential projects?
- Are there areas of flooding in your community that aren't documented?
- Can you provide existing studies to inform our scoping efforts (well-siting, detention basin, creek daylighting, flood studies)?
- Are there restricted areas we should avoid?
- Are there existing successful projects or project elements that you would like to see replicated?

## Reconvene

## Next Steps

- Incorporate Stakeholder Input
- Update Study Area
- Identify
- Reconvene

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